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ANDREA BEATTY RINIKER
Director

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
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January 7, 1987

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Superfund Branch

Dr. Robert E. Dolphin, Director
Yakima Agricultural Research Lab
3706 West Nob Hill Blvd.
Yakima, WA 98902

RE: Approval of Facility No. WAD120513957
Closure Plan

Dear Dr. Dolphin:

On December 8, 1986, we sent the Yakima Agricultural Research Lab (YARL) Closure Plan to EPA for Superfund review. EPA has indicated that they will not be able to review the plan until sometime in the near future. They suggested, however, that we go ahead with closure of the facility under RCRA, with the understanding that you may be required to gather additional information or take additional steps under CERCLA and SARA (Superfund Amendments and Reauthorization) to have the site delisted from the National Priority List.

I realize it would be preferable to coordinate closure of the facility under both RCRA and CERCLA. However, we feel it is best to keep moving ahead with the project, so we will proceed with closure under RCRA.

This letter is to document our intent to approve the YARL Closure Plan. Additional comments on the plan, from our resident hydrogeologist, Denis Erickson, are listed in the attached WDOE interoffice memorandum dated December 24, 1986.

You will need to comply with these comments for final plan approval. It is not necessary to modify the plan for further review by WDOE, but you must amend the appropriate sections and figures to reflect Denis' comments prior to public notice.

As you can see, most of Denis' comments are fairly straightforward. Comment 5. asks for clarification concerning which parameters are to receive quadruplicate tests during the first sampling event. I think the best way to address this comment is to revise your laboratory analysis plan to conform to the requirements of 40 CFR 265.92(3)(c)(2). This regulation states that four replicate measurements will be obtained for each sample (from all wells), for pH, specific conductance, total organic carbon, and total organic halogen, quarterly for one year. Replicate measurements are not necessary for the other parameters listed in Table 1 of the YARL Closure Plan.

If you have a problem with any of these comments, please contact me. Otherwise, we will assume you are revising the closure plan for public notice and we will proceed with plans to close the facility under RCRA.

At this time, we plan to publish the Determination of Non-Significance and begin public notice of our intent to approve the closure plan at the end of January. I will be sending you the necessary information within the next two weeks. We need to receive a revised copy of the plan before the public notice can be issued.

Thank you for returning a completed Environmental Checklist. It looks fine.

Sincerely,

K E Anderson

Kimberly E. Anderson
Environmental Quality Division

KEA:ch

Attachment: Memo dated December 24, 1986

cc: Marsha Beery, WDOE
Lori Cohen, EPA

MEMORANDUM

December 24, 1986

TO: Kim Anderson

FROM: Denis Erickson DE
Hydrogeologist

SUBJECT: Review Comments on Ground Water Portion of the Closure Plan for the Yakima Agriculture Research Laboratory
WAD 120513957

I have reviewed the ground water portions of the ammended closure plan for the Yakima Agriculture Research Laboratory. The cover letter for the closure plan is dated December 17, 1985. The plan was received by me for review December 11, 1986. As a point of clarification this is the first time that I have been able to review the plan. My previous input was limited to a telephone conversation with Dom Reale in which we discussed some conceptual approaches to ground water monitoring.

In general the plan looks good. I have a few detailed comments that should be addressed when the plan is implemented. These comments are listed as follows:

1. The location of the upgradient well is too far away from the grouping of downgradient wells to accurately define the ground water flow direction at the drainfield. If possible the upgradient well should be moved closer to the drainfield. I have not been to the site so I am not familiar with the access limitations. Ideally the well would be located upgradient from the drainfield a sufficient distance, say 50 feet, so that it would be unaffected by the regulated unit. This would allow better triangulation conditons to define the ground water flow direction.
2. The plan refers to using a commercial well driller to install the monitoring wells. I suggest that the facility try to use a commercial well driller experienced with installing monitoring wells.
3. I have two comments on the proposed well construction:
    a. The monitoring well design should be based on the site-specific hydrogeology observed during the drilling. If hydrogeologic barriers are observed during drilling then well seals should appropriately installed to prevent cross-contamination of water-bearing zones. My main concern is the use of "clean backfill" in the annular space rather than sealant material such as a grout/bentonite mixture. Also depending on the permeability contrast of the "clean backfill" and the surrounding water-bearing zones the "clean backfill" approach may not accurately define

vertical hydraulic gradients.
b. Ecology's preferred approach for installing multiple well completions (well nests) is to install each well in a separate borehole. This eliminates the possibility of cross-contamination between the wells.

4. The plan states that the sampling pump is "dedicated". This implies that a separate pump will be installed in each well during the duration of the monitoring program. Yet, in other parts of the plan, the decontamination of the pump is described. Ecology prefers the use of dedicated pumps. If, however, the pump is to be moved and decontaminated between wells, one transfer blank should be obtained each sampling event.

5. It is not clear from the plan (page 6) which parameters are to receive quadruplicate tests the first sampling event. Also, since pH and specific conductance are to be measured in the field using calibrated meters I suggest that quadruplicate tests be conducted on these parameters on separate aliquots obtained during the sampling. This will help to define the natural variance of this parameters at little or no extra cost.

I think that one thing you should emphasize with the facility is that it is a rare occurrence that a facility can install an adequate ground water monitoring network in one step. After the first sampling event and water levels are obtained Ecology should review the data to ensure that the wells are correctly placed.
Thank you for the opportunity to comment on the plan and good luck with your project.